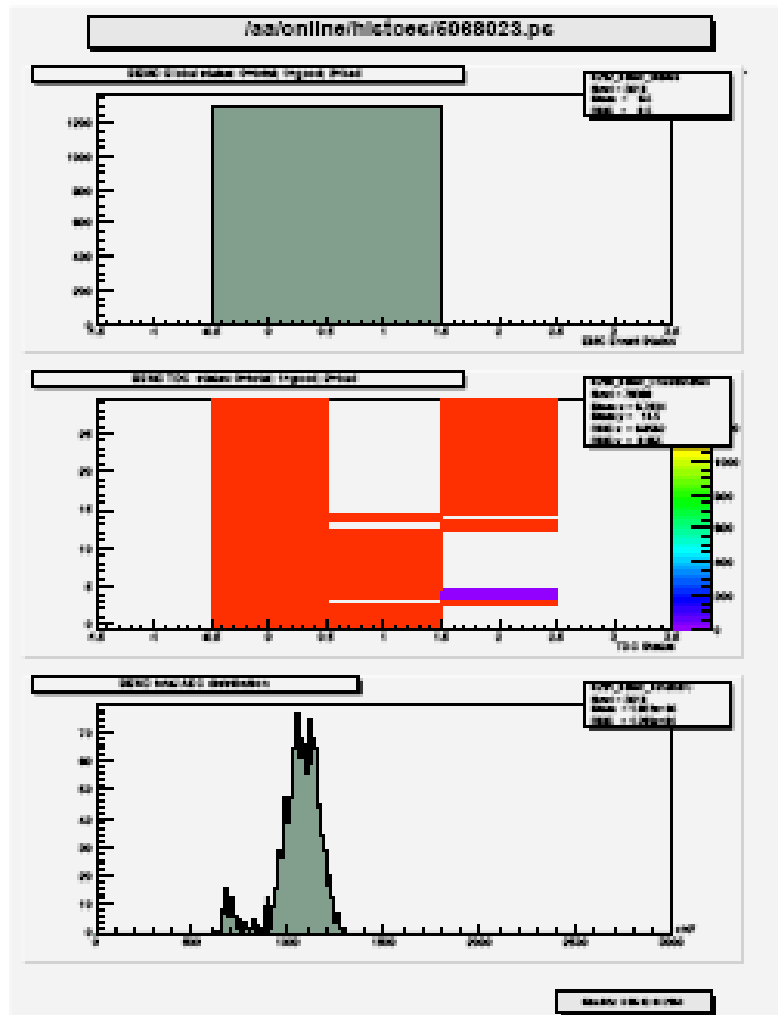# BEMC Online Histograms

BEMC detector tab in the online histograms software has 7 sub-tabs on it to describe the status of the data that is being taken with the detector. The tabs are:

- **BemcStatus**
  - This tab describe the global status of the BEMC towers
- **BemcCrates 0-14**
  - This tab shows the ADC sum for the tower data collector channels 0-14. Each tower data collector channel corresponds to one BEMC tower digitizer crate
- **BemcCrates 15-29**
  - The same as above for the tower data collector channels 15-29
- **Bsmd**
  - This tab shows the status of the Shower Max Detector
- **BsmdFiber 0-3**
  - This tab shows the ADC sum distribution for the SMD crates 0 to 3
- **BsmdFiber 4-7**
  - The same as before for the SMD fibers 4 to 7
- **HighTower, Patch**
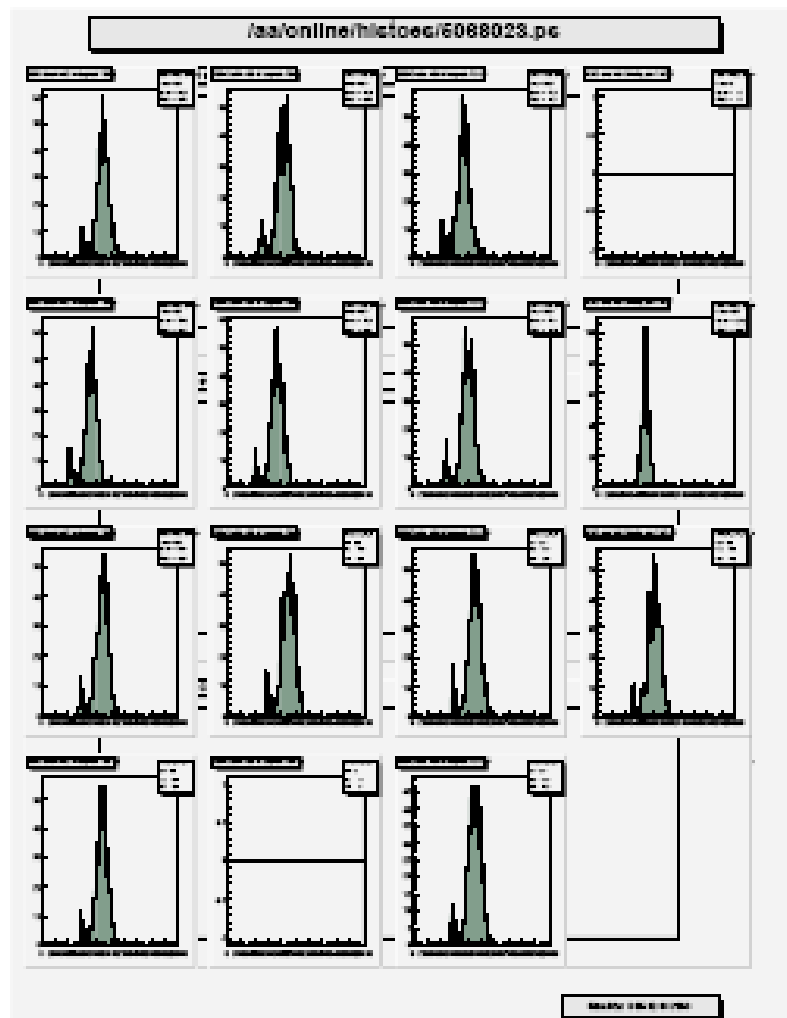 - This tab shows the BEMC trigger data

BemcStatus

This tab has 3 plots on it

- **Bemc Global Status**
  - This 1D histogram shows the global status of the events being taken. 0 is the total number of events processed, 1 is the total number of good events, 2 is the total number of bad events
- **Bemc TDC status**
  - This 2D histogram shows the status of the events taken for each tower data collector channel. The X-axis is the status and Y-axis is the TDC channel.
- **Bemc total ADC distribution**
  - This 1D histogram shows the ADC sum for the detector
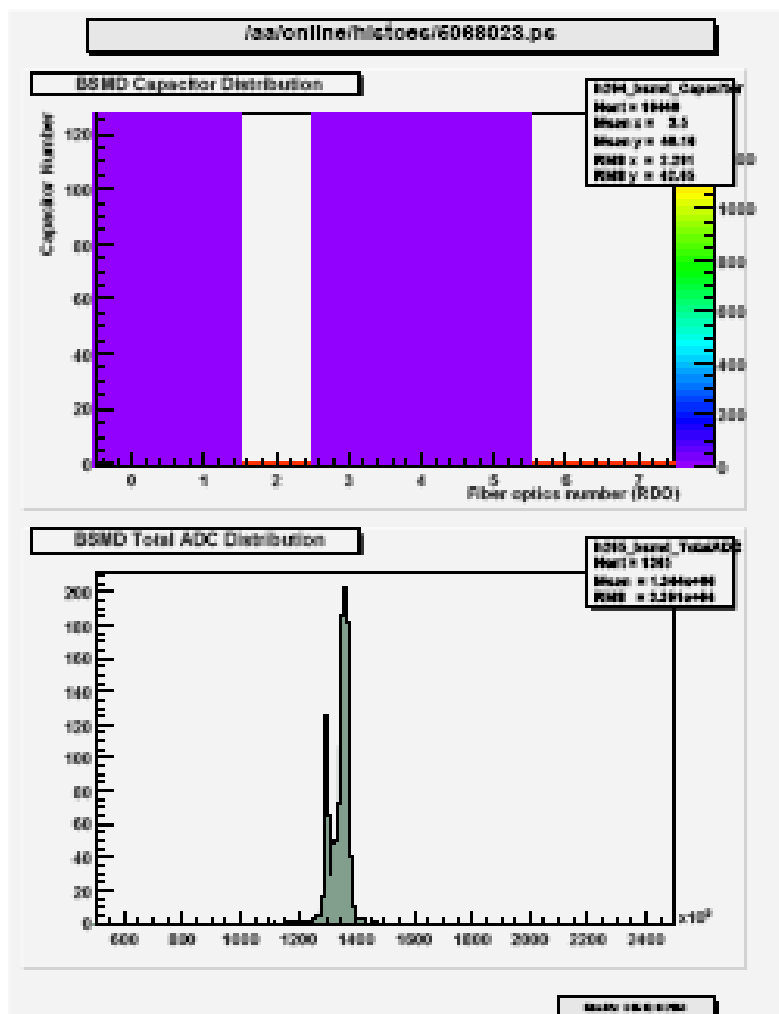
BemcCrates 0-14 and 15-29

This page shows 1D histograms for the ADC sums in each TDC channel. Dead crates will show no distribution. There are 15 1D histograms in each page
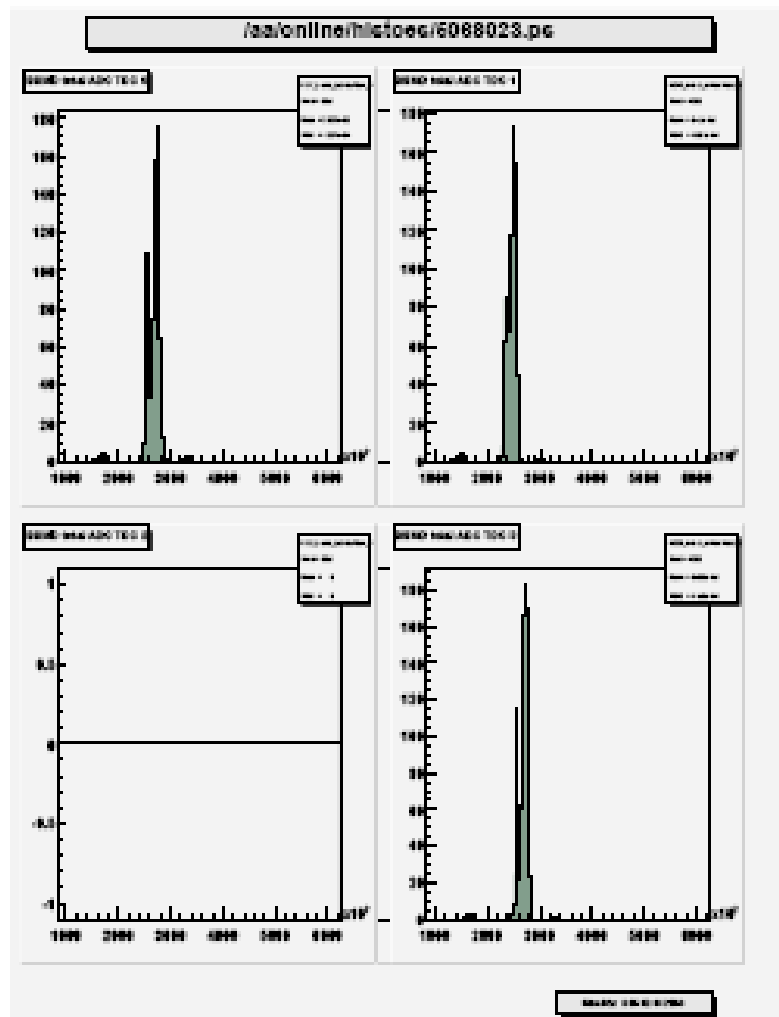
Bsmd

This page shows the status of the SMD detector. There are 2 histograms in this page
- **BSMD Capacitor Distribution**
  - o This 2D histogram shows the capacitor number (Y-Axis) versus the SMD crate number (X-Axis). Dead or unused crates will show only zeros in the corresponding crate position.
- **BSMD total ADC distribution**
  - o This 1D histogram shows the ADC distribution for the entire SMD detector

BsmdFiber 0-3 and 4-7

This page shows 1D histograms for the ADC sums in each SMD crate. Dead crates will show no distribution. There are 4 1D histograms in each page.

HighTower, Patch

This tab shows some BEMC trigger data. There are 4 histograms on it. The 2D histograms are the ADC distribution (Y-Axis) for each one of the BEMC trigger towers (or patch sums). The 1D histograms are the projection on the ADC axis of all the trigger towers (or patch sums)